

ABSTRACT

Coding section 101 performs coding processing on transmission data and modulation section 102 modulates the output signal of coding section 101. Coding section 5 103 performs coding processing on a pilot signal, modulation section 104 performs primary modulation on the output signal of coding section 103 and spreading section 105 performs secondary modulation on the output signal of modulation section 104 by multiplying the 10 signal by a specific spreading code. Superimposing section 106 superimposes the output signal of modulation section 102 and the spread pilot signal output from spreading section 105. Radio section 107 applies predetermined radio processing to the superimposed 15 signal and then transmits the signal from transmission antenna 108 by time division or frequency division. This allows a radio communication system that adopts a TDMA system or FDMA system to perform radio communications at a high data rate.